

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C44.213
Issue 2, Feb., 1955
AT&T Co Standard

TELEPHONE BOOTH

KS-14611, LIST 2

INSTALLATION

1. GENERAL

1.01 This section is reissued to include additional information covering the installation of the KS-14611, List 2 all-metal telephone booth. Due to extensive revision, marginal arrows have been omitted.

1.02 The following special tools are required for installation of the booth:

- (a) Screwdriver, Phillips, No. 2
- (b) Wrench, double, offset, KS-14962
- (c) Wrench, key, hexagonal, Allen, 5/64-inch
- (d) Wrench, Allen, KS-8187

2. SURVEY

2.01 A representative of the telephone company should generally:

- (a) Select an easily accessible location for the booth and arrange to have the space available in time for the delivery of the booth.
- (b) Make arrangements for the connection of electric service to the booth. Provide a switch to control electric power according to local instructions.
- (c) Select a location free from hazards to the booth and to those using it. Some conditions to consider are:
 - (1) Broken or uneven pavements.
 - (2) Service pits and lifts.
 - (3) Vehicular traffic, etc.

(d) Arrange for a concrete base where required (see Fig. 1). No special foundation is necessary when the KS-14611, List 2 booth is installed indoors, on concrete pavement or platforms on porches or floors that are a permanent part of the building.

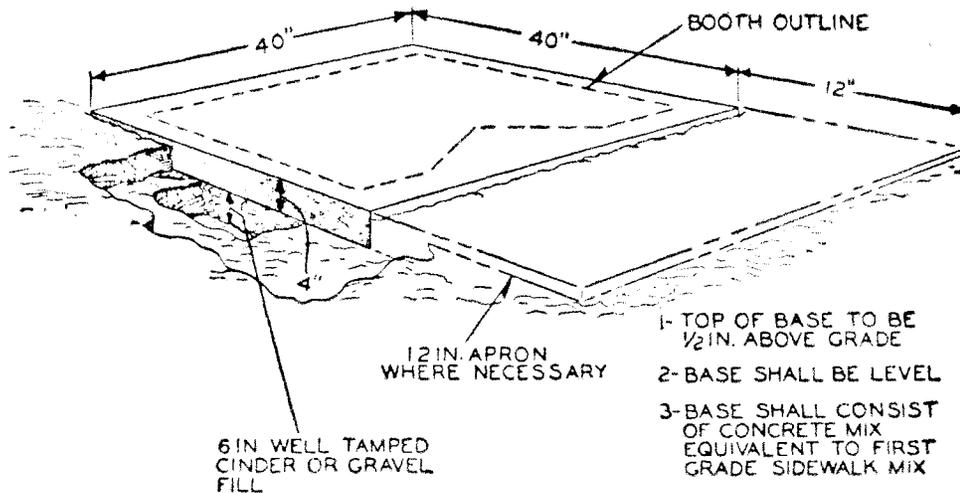


Fig. 1—Poured Cement Base

3. DIRECTORY INSTALLATION

3.01 The directory requirements should be determined by the Commercial Department. The directory rack will accommodate two 3-inch binders, four 1-1/2-inch binders, or one 3-inch and two 1-1/2-inch binders. Several smaller directories may be placed in a binder with multiple fasteners. An apparatus blank assembly should be installed when only one space of the directory rack is used. In locations where a single 1-1/2-inch binder is to be used, a spacer should be ordered to fill out the space on the directory hinge pin. This spacer is listed in Section C44.212, Issue 2, Telephone Booth, KS-14611, List 2, Supplies. Use a 216B tool to remove the nut from the hinge pin located under the directory shelf. Remove the hinge pin and assemble directory binders in the rack by sliding the hinge pin through the hinge of the binder and tighten nut.

4. LOCATING

4.01 The booth will be delivered mounted on a removable skid and cross brace. They are **not to be removed** until the booth is in place and ready to be anchored. In order to slide the booth from the skid, remove the tie-down bolts on the inside of the booth.

4.02 The skid is so designed that it may be used as a guide to locate holes for anchoring the adjustable mounting brackets as in Fig. 2. These brackets may be fastened on either the inside or outside surface of the booth by using Diamond Keystone 3/8-inch by 2-inch expansion shields with 3/8-inch—16 by 2-1/2-inch hex head machine bolts, or their equivalent. The booth shall be leveled by adjusting the anchoring brackets (Fig. 5) with the KS-14962 wrench so that the booth is plumb in both directions. Observe that the clearance between the vertical edge of the closed door and the door frame of the booth is equal at both top and bottom.

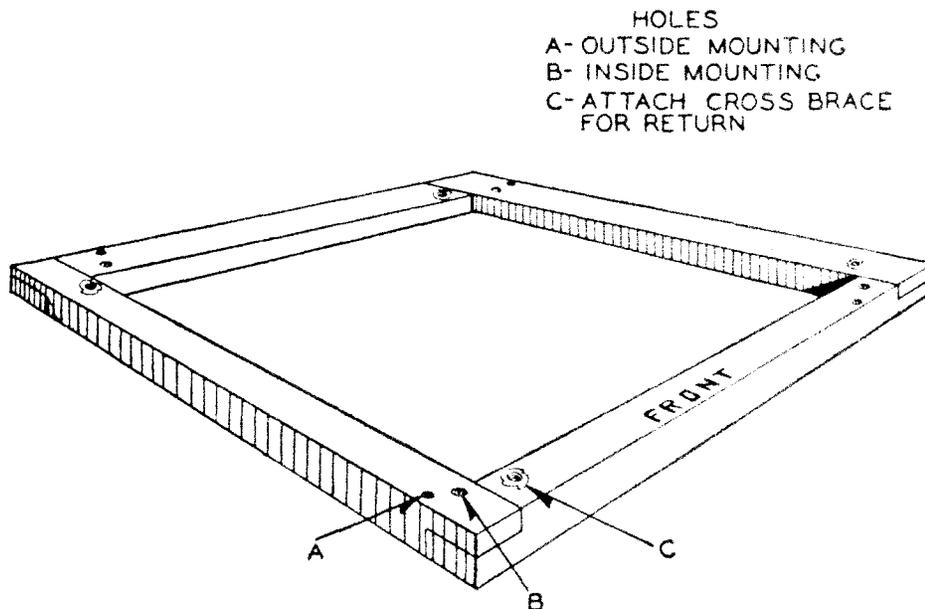


Fig. 2—Shipping Skid

4.03 The booth shall be mounted on a poured concrete base, a precast slab, or other suitable level base. Where a stepdown is required, a 12-inch apron should be provided. For concrete slab and apron construction, see Fig. 1. Larger slabs should be used in areas subject to high wind velocities, as recommended by local instructions. The larger slab should be generally 48 inches square by 4 inches deep.

4.04 The KS-14611, List 2 booth **shall not be moved without the skid and cross brace being in place.** The door must also be secured with several wraps of friction tape, or its equivalent, around the center of the folded door, using the directory

rack as an anchorage. After the booth is in place, the skid and cross brace are to be returned to the Western Electric Company. Bolt the skid and cross brace together by aligning the holes in the cross brace with those in the reverse side of the skid, using the booth tie-down bolts.

5. WIRING

5.01 All wiring shall be in accordance with the National Electrical Code and any local regulations that may apply.

5.02 Access to the subscriber set, protector, and light fixture is gained by loosening two captive "socket-head" screws in the ceiling using the KS-8187 Allen wrench. This will allow the ceiling to rest on two safety latches, which are adjacent to the ceiling fasteners. Releasing the latches will allow the ceiling to swing down for access to the apparatus mounting plate and the lamp fixture. **Exercise care** to avoid contact with the edge of the hinged ceiling during this operation. **Wear eye protection** when lowering the ceiling, due to the possibility of an accumulation of dirt, insects, etc., falling into the eyes. When placing the fluorescent lamps, **wear eye protection** in the event of lamp breakage. Make certain that the lamp fixture is equipped with TC-12 starters. The TC-12 starter requires 4 to 10 seconds to operate. This feature provides steady unblinking operation of the fluorescent lamps, thereby prolonging their period of use. Types other than the TC-12 cause the light to flash on and off several times before the filament temperature is sufficient to maintain a steady flow of current. It is this intermittent operation of the tubes that causes rapid element fatigue, requiring frequent replacement of the lamps.

5.03 The right rear corner post of the booth is constructed with dual channels to provide for telephone wires on the right and power wiring on the left side. The wiring may enter either the top or bottom of the respective channels. The power circuit shall terminate on the receptacle located at the top of the channel. The telephone service should terminate on either a 111A protector or a 42A connecting block, as required. Two tapped holes in the apparatus mounting plate have been provided for No. 8 machine screws. One is to be used to terminate the protector or signaling ground wire, the other for the last attachment of the drop wire (see Fig. 3). The last attachment may be a No. 4 cable clamp. Drop-wire span to the booth should not exceed 25 feet.

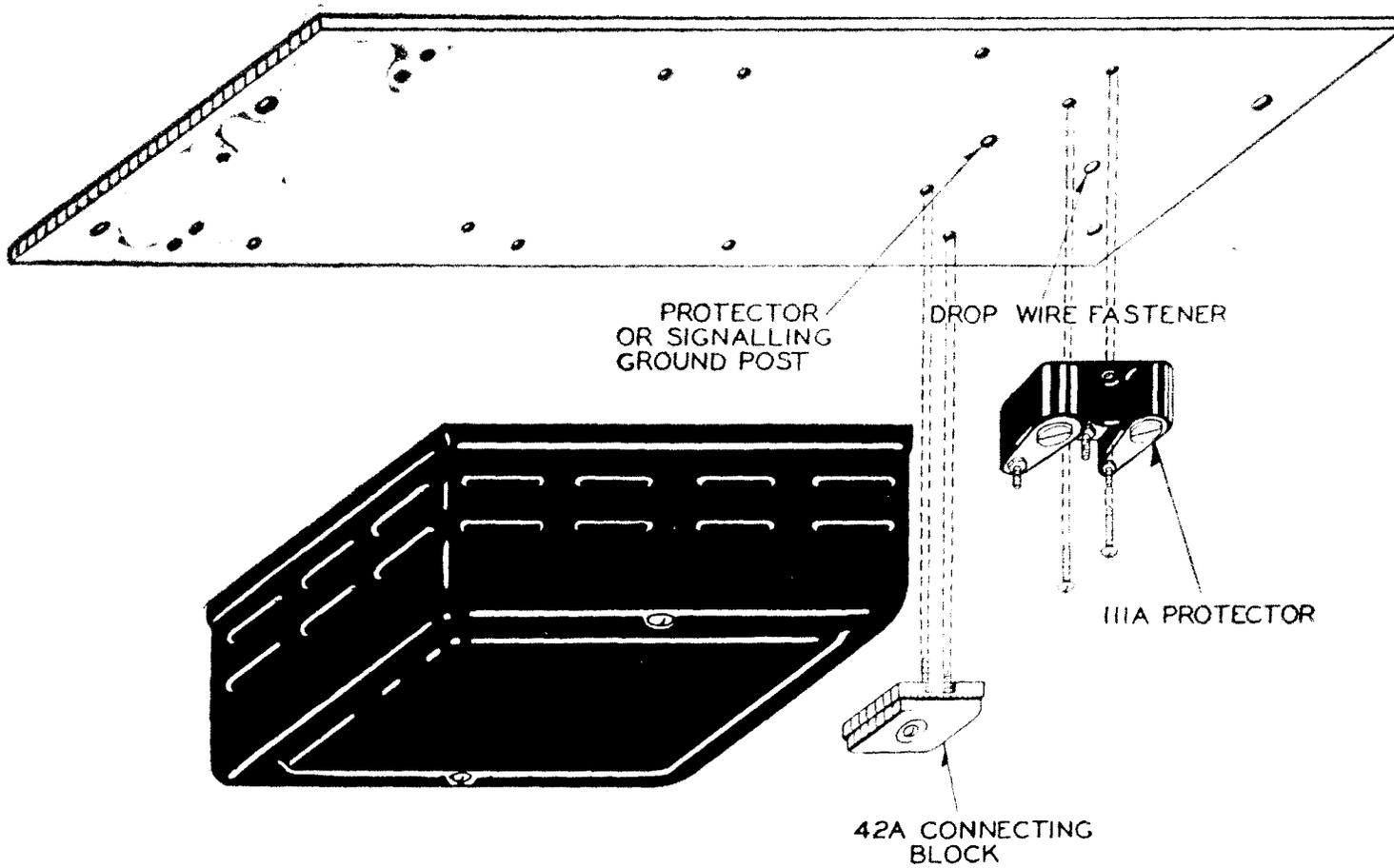


Fig. 3—Apparatus Plate

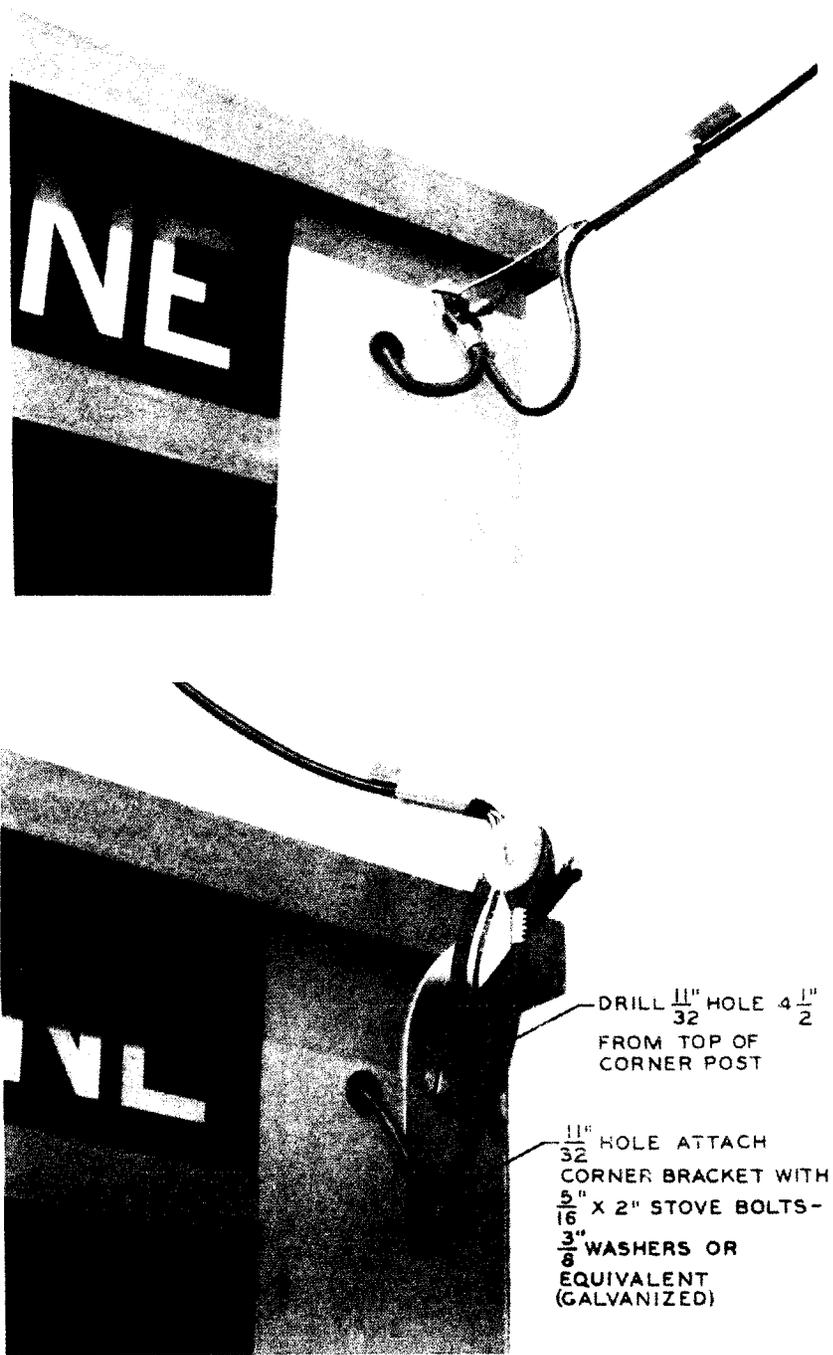


Fig. 4—Typical First Attachment

5.04 The first attachment on the booth may be a drop-wire hook or corner bracket located on the right side of the rear corner post. There is provision for the attachment using a drop-wire hook; however, if the route of the loop requires the placing of a corner bracket, holes must be drilled for fasteners (see Fig. 4). The roof is secured by four wing nuts that should be finger tight and may be removed to facilitate booth wiring.

6. GROUNDS AND PROTECTION

6.01 The all-metal construction of the KS-14611, List 2 outdoor booth necessitates certain precautions to insure adequate protection to those using the booth.

6.02 The ACL, conduit, or grounding conductor from the booth shall be connected to the power wiring system ground as required in Section 2557, Article 250, of the National Electrical Code.

6.03 When the electric service to the booth is furnished by 3-wire nonmetallic sheath cable, the armor, conduit, or ground conductor from the booth shall be connected to the grounding conductor of the 3-wire nonmetallic sheath cable. In the case of 2-wire nonmetallic sheath cable, the armor, conduit, or grounding wire from the booth shall be bonded at the most convenient point to either grounded armor, metal raceway, water pipe, or system grounding electrode, using No. 12 ground wire and ground clamp.

6.04 When fused protection is required, the protector may be located on the outside surface of the booth. Mount the protector on the right rear column as high as practicable, using self-tapping screws. Connect a No. 14 station ground wire between the protector ground post and the apparatus mounting plate inside the booth ceiling.

6.05 The following illustrations, Figs. 6 through 9, illustrate the essential grounding requirements of the National Electrical Code to be followed in the installation of the KS-14611, List 2 metal booth.

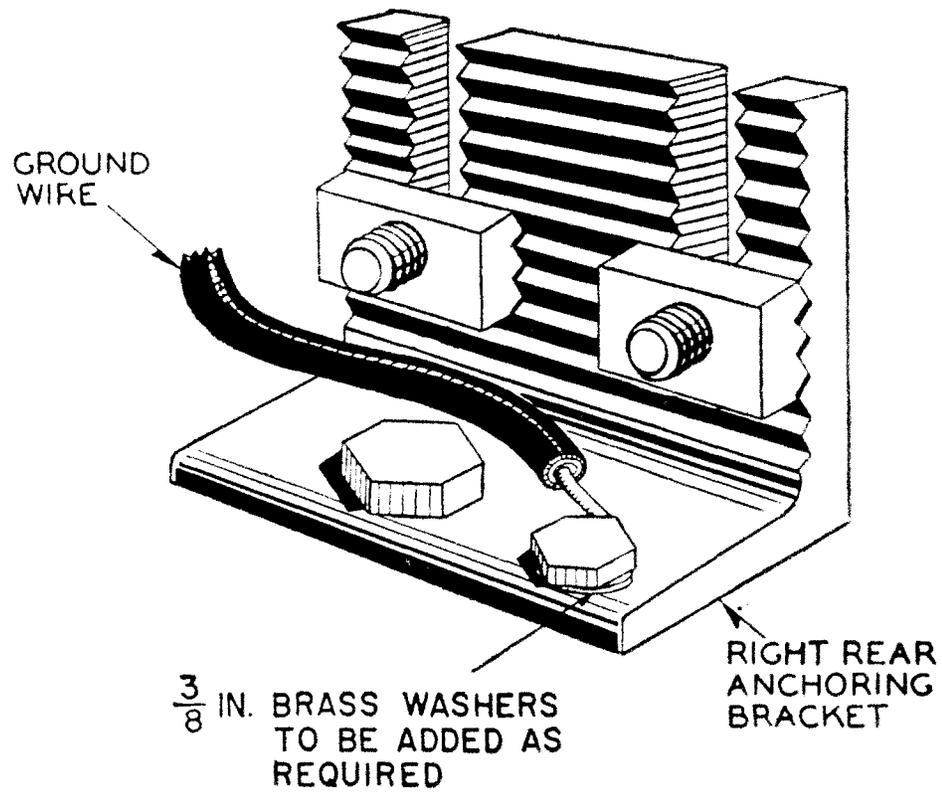


Fig. 5—Adjustable Anchoring Bracket

NOTE:
1. MULTI-GROUNDED NEUTRAL POWER SUPPLY.

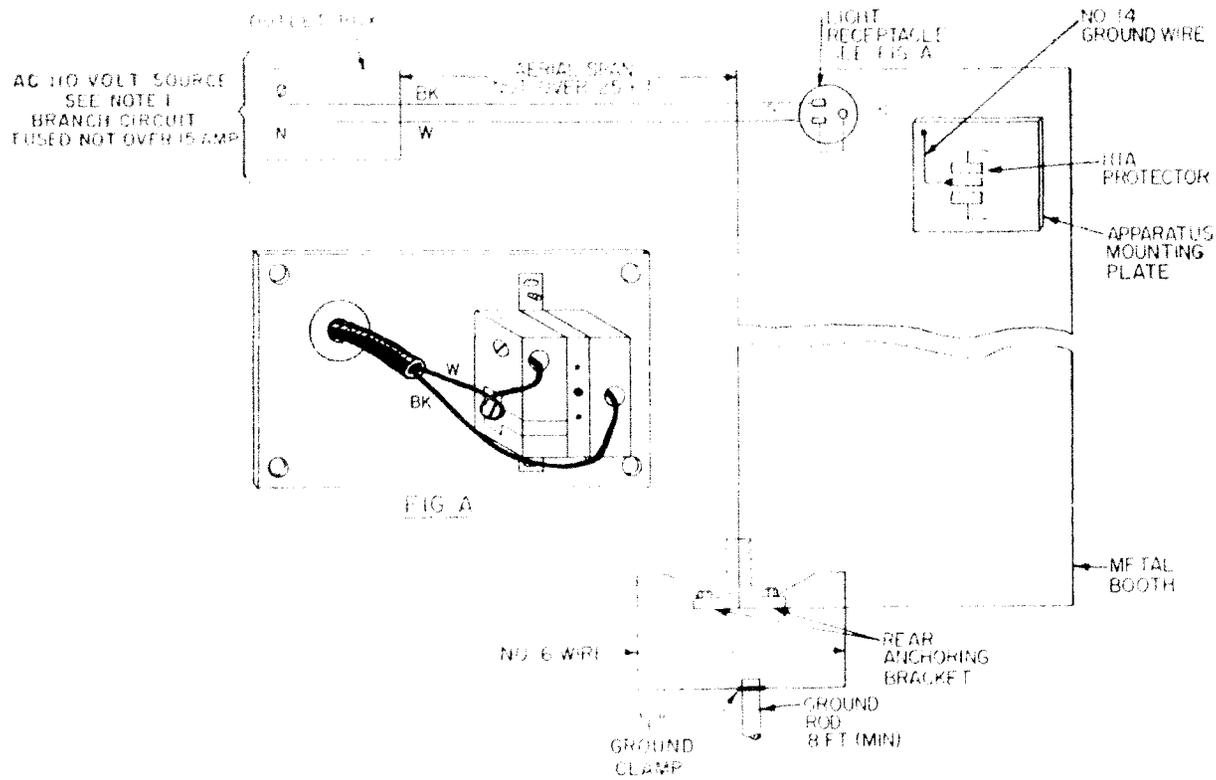


Fig. 6—Metal Booth—Grounding Requirements

TELEPHONE BOOTH
KS-14611, LIST 2
INSTALLATION

C44.213
Page 9

NOTES

- 1 NON-MULTI-GROUNDED NEUTRAL POWER SUPPLY.
- 2 THIS CONDUCTOR TO BE COLORED GREEN AT EACH END

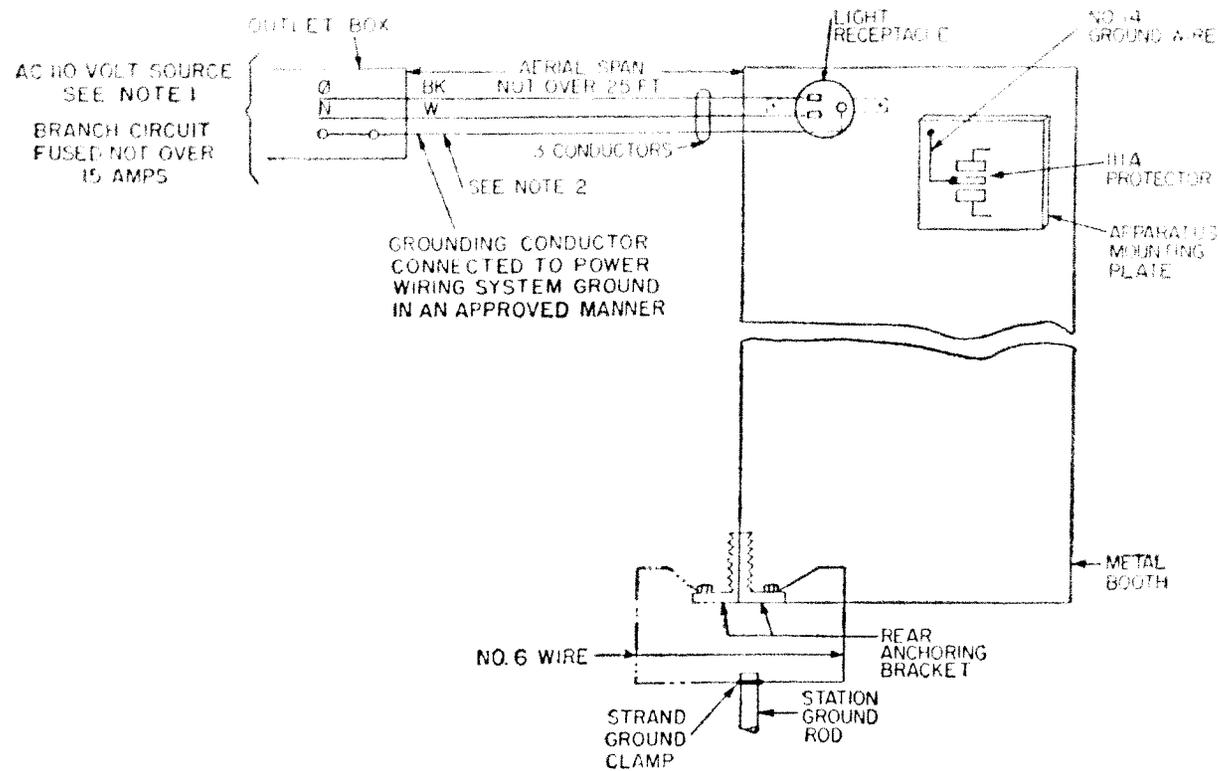


Fig. 7—Metal Booth—Grounding Requirements

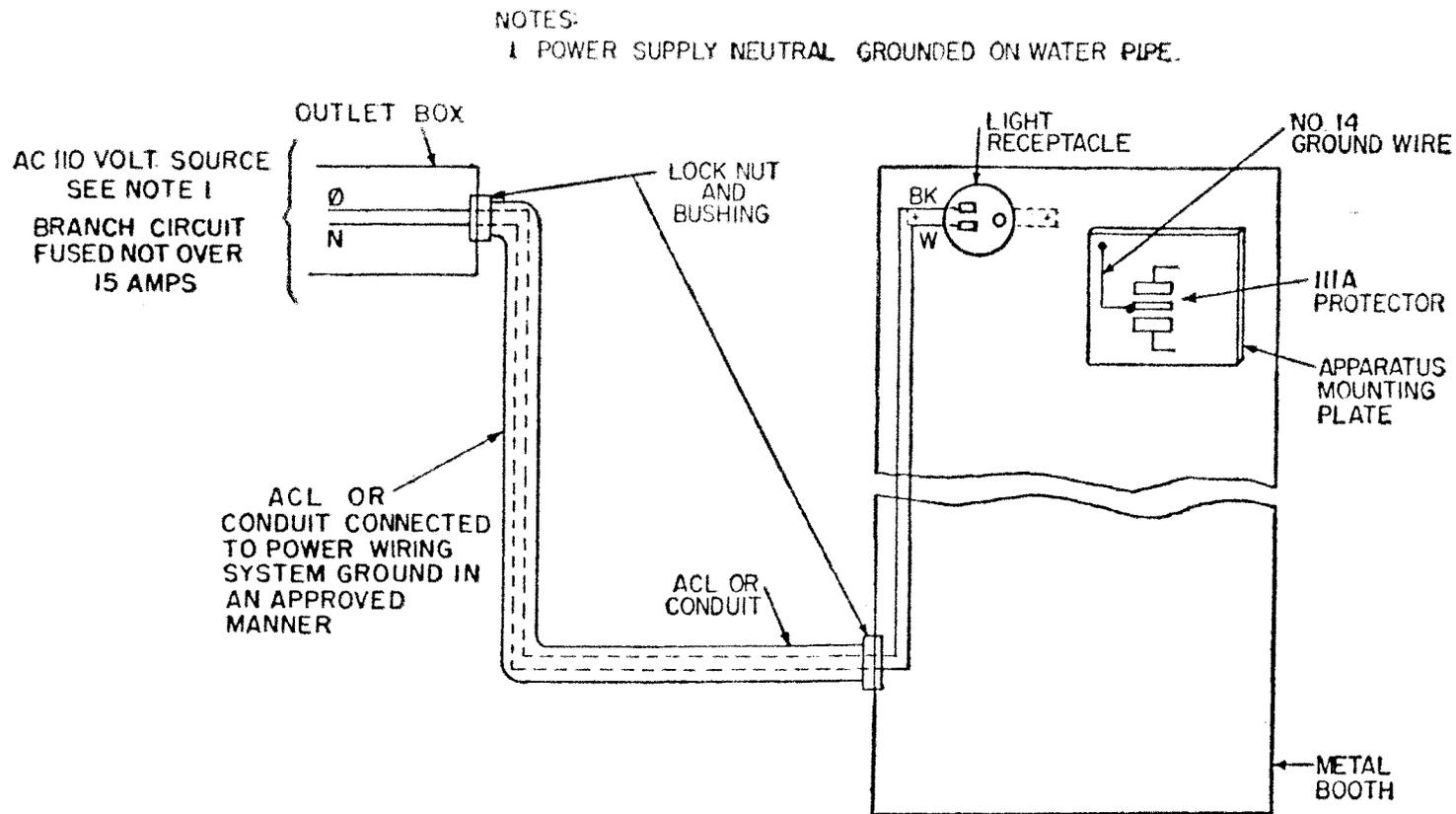


Fig. 8—Metal Booth—Grounding Requirements

NOTES:

1. POWER SUPPLY GROUNDED TO OTHER THAN WATER PIPE.

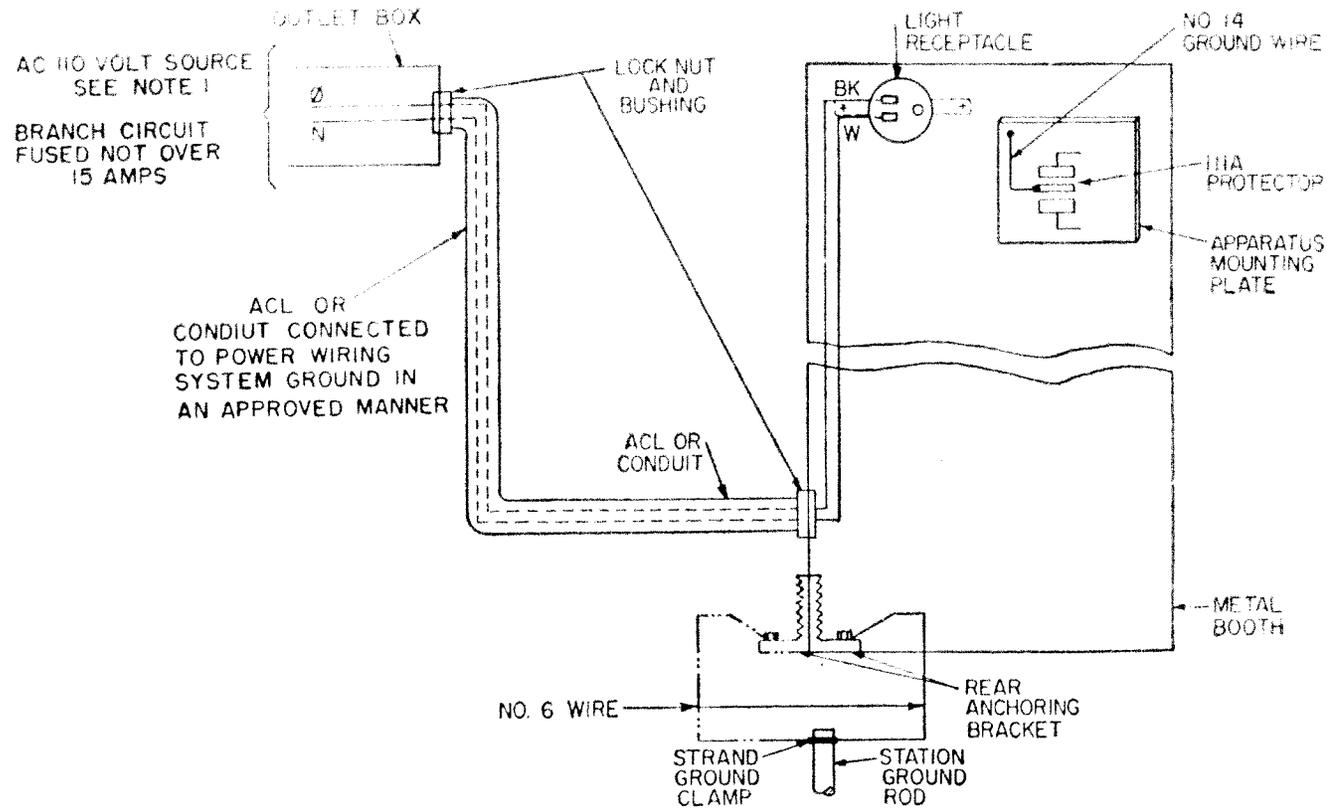


Fig. 9—Metal Booth—Grounding Requirements